

IN THE CLAIMS

Please cancel Claims 4 and 11

1. (currently amended) A method of making a filter medium for use in a filtering application at an application temperature comprising:

providing a substrate;

providing a polyimide stiffening agent in solution selected from the group consisting of polyetherimides and polybismaleimides;

diluting the polyimide stiffening agent solution to approximately 5.5% solids;

treating the substrate with the polyimide stiffening agent solution;

curing the treated substrate; and

pleating the treated substrate, after curing the treated substrate, at a temperature above the application temperature, wherein the application temperature is greater than about 375°F;

wherein the treated substrate with the polyimide stiffening agent is capable of withstanding at least 100,000 cleaning pulses at a temperature of about 375°F, a flowrate of about 1200 cubic feet per minute, and a pressure of about 60psi.

2. (previously presented) The method of claim 1, further including calendering the substrate after the step of providing a substrate and before the step of treating the substrate.

3. (original) The method of claim 1, wherein the substrate is selected from the group consisting of polyarylene sulfides, aramides, polyimides, glass, acrylics, pre-oxidized acrylics and mixtures thereof.

4. (canceled)

5. (canceled)

6. (canceled)

7. (original) The method of claim 1, wherein the polyimide stiffening agent is about 2% to about 20% by weight of the total weight of the filter medium.

8. (canceled)

9. (currently amended) A method of making a filter medium for use in a filtering application at an application temperature comprising:

providing a polymer substrate;

calendering the polymer substrate;

providing a polyimide stiffening agent in solution selected from the group consisting of polyetherimides and polybismaleimides;

diluting the polyimide stiffening agent solution to approximately 5.5% solids;

treating the calendered polymer substrate with the polyimide stiffening agent solution;

curing the treated polymer substrate; and

pleating the treated substrate, after curing the treated substrate, at a temperature of about ~~430°C~~ 430°F, wherein the treated polymer substrate with the polyimide stiffening agent is capable of withstanding at least 100,000 cleaning pulses at a temperature of about 375°F, a flowrate of about 1200 cubic feet per minute, and a pressure of about 60psi.

10. (previously presented) The method of claim 9, wherein the polymer substrate is selected from the group consisting of polyarylene sulfides, aramides, polyimides, acrylics, pre-oxidized acrylics and mixtures thereof.

11. (canceled)

12. (canceled)

13. (canceled)

14. (original) The method of claim 9, wherein the polyimide stiffening agent is about 2% to about 20% by weight of the total weight of the filter medium.

15. (original) The method of claim 9, wherein the application temperature is greater than about 375°F.

16. (previously presented) A method of making a filter medium for use in a filtering application at an application temperature comprising:

providing a substrate;

calendering the substrate;

providing a polyimide stiffening agent selected from the group consisting of polyetherimides and polybismaleimides;

treating the calendered substrate with the polyimide stiffening agent;

curing the treated substrate; and

pleating the treated substrate at a temperature that is higher than the application temperature.

17. (original) The method of claim 16, wherein the substrate is selected from the group consisting of polyarylene sulfides, aramides, polyimides, glass, acrylics, pre-oxidized acrylics and mixtures thereof.

18. (canceled)

19. (previously presented) The method of claim 16, wherein the calendered substrate with the polyimide stiffening agent is capable of withstanding at least 100,000 cleaning pulses at a temperature of about 375°F, a flowrate of about 1200 cubic feet per minute, and a pressure of about 60psi.

20. (original) The method of claim 16, wherein the polyimide stiffening agent is about 2% to about 20% by weight of the total weight of the filter medium.

21. (original) The method of claim 16, wherein the application temperature is greater than about 375°F.